RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *10/722,176*

Source: *FWO*

Date Processed by STIC: *12/17/03*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221
Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
<u>http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm</u>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<u><http://www.uspto.gov/ebc/efs/downloads/documents.htm></u> , **EFS Submission User Manual** - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (**EFFECTIVE 12/01/03**):
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 4B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _10/722,176_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics
Wrapped Aminos
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 ____ Invalid Line Length
The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 ____ Misaligned Amino Numbering
The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4 ____ Non-ASCII
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5 ____ Variable Length
Sequence(s) ____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 ____ PatentIn 2.0 "bug"
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7 ____ Skipped Sequences (OLD RULES)
Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 ____ Skipped Sequences (NEW RULES)
Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 ____ Use of n's or Xaa's (NEW RULES)
Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 ____ Invalid <213> Response
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11 ____ Use of <220>
Sequence(s) ____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12 ____ PatentIn 2.0 "bug"
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 ____ Misuse of n/Xaa
"n" can only represent a single <u>nucleotide</u>; "Xaa" can only represent a single <u>amino acid</u>

AMC – Biotechnology Systems Branch – 09/09/2003

RAW SEQUENCE LISTING   DATE: 12/17/2003
PATENT APPLICATION: US/10/722,176   TIME: 10:30:58

Input Set : A:\Seqlist.txt
Output Set: N:\CRF4\12112003\J722176.raw

```
   4 <110> APPLICANT: Rana, Tariq
   6 <120> TITLE OF INVENTION: DELIVERY OF siRNAs
   9 <130> FILE REFERENCE: UMY-059
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/722,176
C--> 11 <141> CURRENT FILING DATE: 2003-11-24
  11 <150> PRIOR APPLICATION NUMBER: 60/430520
  12 <151> PRIOR FILING DATE: 2002-11-26
  14 <160> NUMBER OF SEQ ID NOS: 16
  16 <170> SOFTWARE: FastSEQ for Windows Version 4.0
  18 <210> SEQ ID NO: 1
  19 <211> LENGTH: 13
  20 <212> TYPE: PRT
  21 <213> ORGANISM: Artificial Sequence
  23 <220> FEATURE:
  24 <223> OTHER INFORMATION: peptide
  26 <400> SEQUENCE: 1
  27 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Cys
  28 1               5                   10
  31 <210> SEQ ID NO: 2
  32 <211> LENGTH: 19
  33 <212> TYPE: PRT
  34 <213> ORGANISM: Artificial Sequence
  36 <220> FEATURE:
  37 <223> OTHER INFORMATION: peptide
  39 <400> SEQUENCE: 2
  40 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
  41 1               5                   10                  15
  42 Gly Gly Cys
  46 <210> SEQ ID NO: 3
  47 <211> LENGTH: 34
  48 <212> TYPE: PRT
  49 <213> ORGANISM: Artificial Sequence
  51 <220> FEATURE:
  52 <223> OTHER INFORMATION: peptide
  54 <400> SEQUENCE: 3
  55 Asp Ala Ala Thr Ala Thr Arg Gly Arg Ser Ala Ala Ser Arg Pro Thr
  56 1               5                   10                  15
  57 Glu Arg Pro Arg Ala Pro Ala Arg Ser Ala Ser Arg Pro Arg Arg Pro
  58           20                  25                  30
  59 Val Glu
  63 <210> SEQ ID NO: 4
  64 <211> LENGTH: 21
  65 <212> TYPE: PRT
```

[Handwritten annotations:] pp 1-4 / Does Not Comply / Corrected Diskette Needed / insufficient explanation - give source of genetic material (see item 11 on Error summary sheet)

RAW SEQUENCE LISTING   DATE: 12/17/2003
PATENT APPLICATION: **US/10/722,176**   TIME: 10:30:58

Input Set : **A:\Seqlist.txt**
Output Set: **N:\CRF4\12112003\J722176.raw**

```
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: peptide
71 <400> SEQUENCE: 4
72 Lys Glu Thr Trp Trp Glu Thr Trp Trp Thr Glu Trp Ser Gln Pro Lys
73 1               5                   10                  15
74 Lys Lys Arg Lys Val
75              20
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 27
80 <212> TYPE: PRT
81 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: peptide
86 <400> SEQUENCE: 5
87 Gly Ala Leu Phe Leu Gly Trp Leu Gly Ala Ala Gly Ser Thr Met Gly
88 1               5                   10                  15
89 Ala Trp Ser Gln Pro Lys Lys Lys Arg Lys Val
90              20                  25
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 16
95 <212> TYPE: PRT
96 <213> ORGANISM Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: peptide
101 <400> SEQUENCE: 6
102 Ala Ala Val Ala Leu Leu Pro Ala Val Leu Leu Ala Leu Leu Ala Pro
103 1               5                   10                  15
106 <210> SEQ ID NO: 7
107 <211> LENGTH: 16
108 <212> TYPE: PRT
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: peptide
114 <400> SEQUENCE: 7
115 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
116 1               5                   10                  15
119 <210> SEQ ID NO: 8
120 <211> LENGTH: 27
121 <212> TYPE: PRT
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: peptide
127 <400> SEQUENCE: 8
128 Gly Ala Leu Phe Leu Gly Trp Leu Gly Ala Ala Gly Ser Thr Met Gly
129 1               5                   10                  15
130 Ala Trp Ser Gln Pro Lys Lys Lys Arg Lys Val
131              20                  25
134 <210> SEQ ID NO: 9
```

```
135 <211> LENGTH: 16
136 <212> TYPE: PRT
137 <213> ORGANISM: Artificial Sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: peptide
142 <400> SEQUENCE: 9
143 Ala Ala Val Ala Leu Leu Pro Ala Val Leu Leu Ala Leu Leu Ala Pro
144  1               5                  10                 15
147 <210> SEQ ID NO: 10
148 <211> LENGTH: 26
149 <212> TYPE: PRT
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: peptide
155 <400> SEQUENCE: 10
156 Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Lys Ile Asn Leu Lys
157  1               5                  10                 15
158 Ala Leu Ala Ala Leu Ala Lys Lys Ile Leu
159               20                  25
162 <210> SEQ ID NO: 11
163 <211> LENGTH: 18
164 <212> TYPE: PRT
165 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: peptide
170 <400> SEQUENCE: 11
171 Lys Leu Ala Leu Lys Leu Ala Leu Lys Ala Leu Lys Ala Ala Leu Lys
172  1               5                  10                 15
173 Leu Ala
177 <210> SEQ ID NO: 12
178 <211> LENGTH: 12
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: peptide
185 <400> SEQUENCE: 12
186 Cys Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
187  1               5                  10
190 <210> SEQ ID NO: 13
191 <211> LENGTH: 21
192 <212> TYPE: RNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: siRNA
198 <221> NAME/KEY: misc_feature
199 <222> LOCATION: 20, 21
200 <223> OTHER INFORMATION: n = deoxythymidine
202 <400> 13
203 gcagcacgac uucuucaagn n
```

W--> 198
W--> 202
W--> 203

thymine (or modification) cannot be shown in an RNA sequence, even if "n" is used.

For a combined DNA/RNA sequence, use <212> DNA and explain in <220>-<223> section

21

12/17/03

```
       205 <210> SEQ ID NO: 14
       206 <211> LENGTH: 21
       207 <212> TYPE: RNA
       208 <213> ORGANISM: Artificial Sequence
       210 <220> FEATURE:
       211 <223> OTHER INFORMATION: siRNA
W-->   213 <221> NAME/KEY: misc_feature          same error
       214 <222> LOCATION: 20, 21
       215 <223> OTHER INFORMATION: n =deoxythymidine
W-->   217 <400> 14
W-->   218 cuugaagaag ucgugcugcn n                              21
       220 <210> SEQ ID NO: 15
       221 <211> LENGTH: 21
       222 <212> TYPE: RNA
       223 <213> ORGANISM: Artificial Sequence
       225 <220> FEATURE:
       226 <223> OTHER INFORMATION: siRNA
W-->   228 <221> NAME/KEY: misc_feature          same
       229 <222> LOCATION: 20, 21
       230 <223> OTHER INFORMATION: n = deoxythymidine
W-->   232 <400> 15
W-->   233 ccaaagcuuc ccccuauaan n                              21
       235 <210> SEQ ID NO: 16
       236 <211> LENGTH: 12
       237 <212> TYPE: PRT
       238 <213> ORGANISM: Artificial Sequence
       240 <220> FEATURE:
       241 <223> OTHER INFORMATION: peptide      error
       243 <400> SEQUENCE: 16
       244 Cys Tyr Gln Arg Lys Lys Arg Arg Gln Arg Arg Arg
       245 1               5                   10
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 12/17/2003
PATENT APPLICATION: US/10/722,176   TIME: 10:30:59

Input Set : A:\Seqlist.txt
Output Set: N:\CRF4\12112003\J722176.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. 20,21
Seq#:14; N Pos. 20,21
Seq#:15; N Pos. 20,21

VERIFICATION SUMMARY   DATE: 12/17/2003
PATENT APPLICATION: **US/10/722,176**   TIME: 10:30:59

Input Set : **A:\Seqlist.txt**
Output Set: **N:\CRF4\12112003\J722176.raw**

```
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:198 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:202 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:13
L:203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:213 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:217 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:14
L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:228 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:232 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:15
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
```